

WHAT IS CLAIMED IS:

1. A timer mechanism for activating a shutter release button of a camera, the mechanism comprising:

a base piece including:

a bottom portion,

an inner hub extending axially upwardly from the bottom portion, the inner hub forming a threaded surface and a central passage;

a top piece including:

a head portion,

an inner post extending axially downwardly from the head portion and forming a central passage and a threaded surface configured to, upon final assembly, threadably engage the threaded surface of the inner hub such that the passages are aligned;

a rod disposed within the central passages, the rod being selectively coupled to the top piece; and

a spiral spring coaxially disposed about the inner hub, the spiral spring having a leading end connected to the top piece;

wherein upon final assembly, the top piece is rotatable relative to the bottom piece in a first direction to a raised position in which energy is stored by the spiral spring, the spiral spring being adapted to rotate the top piece in an opposite direction from the raised position, causing the top piece to move downwardly relative to the bottom piece via interface between the threaded surfaces, the top piece forcing the rod downwardly through the central passages for depressing a camera shutter release button during the downward movement.

2. The timer mechanism of claim 1, wherein the top piece further includes a retention device extending axially downwardly from the head portion and adapted to receive the leading end of the spiral spring.
3. The timer mechanism of claim 2, wherein the retention device is a post.
4. The timer mechanism of claim 3, wherein the post is radially offset from a central axis of the headpiece.
5. The timer mechanism of claim 1, wherein the base piece further includes an outer ring extending axially upwardly from the bottom portion, the outer ring defining an inner diameter greater than an outer diameter of the inner hub.
6. The timer mechanism of claim 5, wherein the top piece further includes an intermediate ring extending downwardly from the head portion and radially spaced from the inner post, and further wherein the intermediate ring is sized to be received by the outer ring of the base piece.
7. The timer mechanism of claim 1, wherein the inner post forms a radial shelf for maintaining the spiral spring.
8. The timer mechanism of claim 1, wherein the rod defines a top end and a bottom end, the bottom end adapted to selectively depress a camera shutter release button, the timer mechanism further comprising:
a cap for selectively capturing the top end of the rod relative to the top piece.
9. The timer mechanism of claim 8, wherein the cap is integrally formed at the top end of the rod.

10. The timer mechanism of claim 1, further comprising a coupling material provided at the base piece for selectively securing the timer mechanism to a camera.

11. The timer mechanism of claim 1, further comprising a thread extending from opposite sides of the base piece for selectively securing the timer mechanism to a camera.

12. The timer mechanism of claim 1, wherein the timer mechanism is configured to direct the rod in a linear motion during a shutter activation operation.

13. A timer mechanism for activating a shutter release button of the camera, the timer mechanism comprising:

- a housing including a top piece threadably secured to a bottom piece, the top and bottom pieces combining to define a central passage;

- a rod slidably maintained within the central passage, the rod defining a top end and a bottom end, the bottom end adapted to depress shutter release button of the camera; and

- a spiral spring connected to the top and bottom pieces;

- wherein a winding of the spring is arranged to dictate a downward movement of the top piece relative to the bottom piece from a raised state;

- and further wherein the rod is arranged to move axially with downward movement of the top piece to a retracted state in which the bottom end is extended from the housing for depressing a shutter release button of a camera.

14. A method of activating a shutter release button of a camera, the method comprising:

providing a timer mechanism including a housing having a top piece threadably secured to a bottom piece, a rod slidably maintained within a central passage of the housing, and a spiral spring connected to the top and bottom pieces;

connecting the timer mechanism to a camera such that a bottom end of the rod is over the shutter release button;

rotating the top piece in a first direction relative to the bottom piece, such that the top piece moves away from the bottom piece and energy is stored in the spiral spring;

allowing the spiral spring to rotate the top piece in a second direction relative to the bottom piece such that the top piece moves toward the bottom piece; and

forcing the rod downwardly as the top piece moves toward the bottom piece; wherein the downward movement of the rod continues until the bottom end depresses the shutter release button.